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10/618,013	07/14/2003	Ichiro Matsuyama	01272.020600.	4393

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EXAMINER

COLES, EDWARD L

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2625

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/618,013

Applicant(s)

MATSUYAMA, ICHIRO

Examiner

Andrew H. Lam

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/06/03.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 17-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claimed invention is a computer related invention. The Computer-Implemented Invention Guidelines issued by the U.S. Patent and Trademark Office describe the procedures for examining such inventions.

The first step is to determine whether the invention as defined by the claims falls within one of the three following categories of unpatentable subject matter: (1) Functional descriptive material such as a data structure per se or a computer program per se, (2) Non-functional descriptive material such as music, literary works or pure data, embodied on a computer readable medium; or (3) A natural phenomenon such as energy or magnetism. The invention as defined by the claims is not a natural phenomenon or pure data, however, it is a computer program per se, which does not mount/store on any computer-readable medium; therefore, these claims are rejected for non-statutory basis.

Claims 17-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The program claimed is merely a set of instructions per se. Since the computer program is merely a set of instructions not

embodied on a computer readable medium to realize the computer program functionality, the claimed subject matter is non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyake (U.S. Patent No. 6,188,490) hereinafter Miyake.

Regarding claim 1, Miyake discloses a printing (fig. 1, printer 20) apparatus comprising: a generation unit (fig. 4, printer driver, PD) for generating a print image to be printed on an area larger than an effective area of paper (col. 4, lines 40-47, the increases designated sheet quantity M); and a printing unit (fig. 4, printer) for printing the print image generated by the generation unit and larger than the effective area of the paper (col. 3, lines 13-18); wherein the generation unit, based on an allocation number representing the number of pages to be allocated to one sheet of paper (col. 4, lines 5-10, see fig. 2(c)-2(d)), clips the pages to generate the print image to be printed on the area larger than the effective area of the paper, the print image having a combination of the clipped pages (col. 4, lines 50-60) .

Regarding claim 2, Miyake discloses a printing apparatus according to claim 1, wherein the generation unit generates a print image by subjecting the pages to zoom processing according to the allocation number (col. 4, lines 55-60).

Regarding claim 3, Miyake discloses a printing apparatus according to claim 1, wherein the clipping performed by the generation unit executes processing on print data allocated to the effective area of the paper including its boundary and different processing on print data allocated to other areas of the paper (col. 4, lines 15-20).

Regarding claim 4, Miyake discloses a printing apparatus according to claim 1, wherein the allocation number is positive integers one for each of x and y directions of the paper (figs. 2(c)-2(e), shows that N is a positive number).

Regarding claim 5, Miyake discloses a printing apparatus according to claim 1, wherein the allocation number is allocation numbers one for each of x and y directions of the paper and is calculated for each of the x and y directions based on a particular value of the allocation number and on x- and y-direction sizes of the paper (figs. 2(c)-2(e), shows that N is a positive number, for $n=1$ to 16).

Regarding claim 6, Miyake discloses a printing apparatus according to claim 4, wherein the printing unit can print a print image that is output with at least one side of the paper taken as an arbitrary size (col. 4, lines 5-10), and the generation unit specifies to the printing unit a size of one side of the paper based on the allocation number, positive integers for the x and y directions, and outputs the print image to the printing unit (col. 5, lines 14-21, n is the allocation number).

Regarding claim 7, Miyake discloses a printing apparatus according to claims 1, wherein the allocation number is a number specified by a specifying unit which specifies the number of pages to be allocated to one sheet of paper (fig. 3, allocation number is specified in print setup).

Regarding claim 8, Miyake discloses a printing apparatus according to claims 1, wherein the generation unit clips a portion of a particular page overrunning a particular area, one of areas produced by dividing the effective area of the paper based on the allocation number, in such a manner that a positional relationship of the particular page allocated to and larger in size than the particular area with respect to the particular area is identical to a positional relationship of the particular page allocated to and larger in size than the effective area of the paper with respect to the effective area of the paper (col. 5, lines 31-44).

Regarding claim 9, Miyake discloses a printing method (fig. 1, printing system) comprising: a generation step (fig. 4, printer driver, PD) of generating a print image to be printed on an area larger than an effective area of paper (col. 4, lines 40-47, the increases designated sheet quantity M); and a printing step (fig. 4, printer) of causing a printing unit to print the print image generated by the generation step and larger than the effective area of the paper (col. 3, lines 13-18); wherein the generation step, based on an allocation number representing the number of pages to be allocated to one sheet of paper (col. 4, lines 5-10, see fig. 2(c)-2(d)), clips the pages to generate the print image to be printed on the area larger than the effective area of the paper, the print image having a combination of the clipped pages (col. 4, lines 50-60).

Regarding claim 10, Miyake discloses a printing method according to claim 9, wherein the generation step generates a print image by subjecting the pages to zoom processing according to the allocation number (col. 4, lines 55-60).

Regarding claim 11, Miyake discloses a printing method according to claim 9, wherein the clipping performed by the generation step executes processing on print data allocated to the effective area of the paper including its boundary and different processing on print data allocated to other areas of the paper (col. 4, lines 15-20).

Regarding claim 12, Miyake discloses a printing method according to claim 9, wherein the allocation number is positive integers one for each of x and y directions of the paper (figs. 2(c)-2(e), shows that N is a positive number).

Regarding claim 13, Miyake discloses a printing method according to claim 9, wherein the allocation number is allocation numbers one for each of x and y directions of the paper and is calculated for each of the x and y directions based on a particular value of the allocation number and on x- and y-direction sizes of the paper (figs. 2(c)-2(e), shows that N is a positive number, for $n=1$ to 16).

Regarding claim 14, Miyake discloses a printing method according to claim 12, wherein the printing step can print a print image that is output with at least one side of the paper taken as an arbitrary size (col. 4, lines 5-10), and the generation step specifies a size of one side of the paper based on the allocation number, positive integers for the x and y directions, and generates the print image (col. 5, lines 14-21, n is the allocation number).

Regarding claim 15, Miyake discloses a printing method according to claims 9, wherein in the generation step, the allocation number is a number specified by a specifying unit which specifies the number of pages to be allocated to one sheet of paper (fig. 3, allocation number is specified in print setup).

Regarding claim 16, Miyake discloses a printing method according to claims 9, wherein the generation step clips a portion of a particular page overrunning a particular area, one of areas produced by dividing the effective area of the paper based on the allocation number, in such a manner that a positional relationship of the particular page allocated to and larger in size than the particular area with respect to the particular area is identical to a positional relationship of the particular page allocated to and larger in size than the effective area of the paper with respect to the effective area of the paper (col. 5, lines 31-44).

Regarding claim 17, Miyake discloses a computer program product for executing a printing (fig. 1, printing system) method, the printing method comprising: a generation step (fig. 4, printer driver, PD) of generating a print image to be printed on an area larger than an effective area of paper (col. 4, lines 40-47, the increases designated sheet quantity M); and a step of outputting to a printing unit (fig. 4, printer) the print image generated by the generation step and larger than the effective area of the paper (col. 3, lines 13-18); wherein the generation step, based on an allocation number representing the number of pages to be allocated to one sheet of paper (col. 4, lines 5-10, see fig. 2(c)-2(d)), clips the pages to generate the print image to be printed on the area larger than the effective area of the paper, the print image having a combination of the clipped pages (col. 4, lines 50-60).

Regarding claim 18, Miyake discloses a computer program product according to claim 17, wherein the generation step generates a print image by subjecting the pages to zoom processing according to the allocation number (col. 4, lines 55-60).

Regarding claim 19, Miyake discloses a computer program product according to claim 17, wherein the clipping performed by the generation step executes processing on print data allocated to the effective area of the paper including its boundary and different processing on print data allocated to other areas of the paper (col. 4, lines 15-20).

Regarding claim 20, Miyake discloses a computer program product according to claim 17, wherein the allocation number is positive integers one for each of x and y directions of the paper (figs. 2(c)-2(e), shows that N is a positive number).

Regarding claim 21, Miyake discloses a computer program product according to claim 17, wherein the allocation number is allocation numbers one for each of x and y directions of the paper and is calculated for each of the x and y directions based on a particular value of the allocation number and on x- and y-direction sizes of the paper (figs. 2(c)-2(e), shows that N is a positive number, for $n=1$ to 16).

Regarding claim 22, Miyake discloses a computer program product according to claim 20, wherein the printing step can print a print image that is output with at least one side of the paper taken as an arbitrary size (col. 4, lines 5-10), and the generation step specifies a size of one side of the paper based on the allocation number, positive integers for the x and y directions, and generates the print image (col. 5, lines 14-21, n is the allocation number).

Regarding claim 23, Miyake discloses a computer program product according to claims 17, wherein in the generation step, the allocation number is a number specified by a specifying unit which specifies the number of pages to be allocated to one sheet of paper (fig. 3, allocation number is specified in print setup).

Regarding claim 24, Miyake discloses a computer program product according to claims 17, wherein the generation step clips a portion of a particular page overrunning a particular area, one of areas produced by dividing the effective area of the paper based on the allocation number, in such a manner that a positional relationship of the particular page allocated to and larger in size than the particular area with respect to the particular area is identical to a positional relationship of the particular page allocated to and larger in size than the effective area of the paper with respect to the effective area of the paper(col. 5, lines 31-44).

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew H. Lam whose telephone number is (571) 272-8569. The examiner can normally be reached on M-F (9:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Aung S. Moe can be reached on (571) 272-7314. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2625

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrew Lan

5/25/07

~~AUNG S. MOE~~
~~SUPERVISORY PATENT EXAMINER~~

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6/8/07